

In the Claims

Please cancel Claims 1-45 and 51-75. Claims 46-49 have been amended and are presented below in amended form, and Claims 78-214 have been added. In accordance with 37 C.F.R. § 1.121(c)(1)(ii), amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (page xi and xii).

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46. (Amended) A method of modulating a GPR-9-6 function comprising contacting a cell that expresses a mammalian GPR-9-6 with an agent which binds thereto, thereby modulating the function of said mammalian GPR-9-6.
47. (Amended) The method of Claim 46 wherein said agent can inhibit a function of said mammalian GPR-9-6.
48. (Amended) The method of Claim 47 wherein said agent is an antibody which binds a mammalian GPR-9-6 or antigen-binding fragment thereof.
49. (Amended) The method of Claim 48 wherein said function is selected from the group consisting of ligand binding, signalling activity and cellular response function.
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78. (New) The method of Claim 49 wherein said signalling activity is ligand-induced  $\text{Ca}^{2+}$  flux and said cellular response function is ligand-induced chemotaxis.
79. (New) The method of Claim 48 wherein the binding of said antibody or antigen-binding fragment to said mammalian GPR-9-6 can be inhibited by a peptide that consists of the amino acid sequence of SEQ ID NO:3.
80. (New) The method of Claim 48 wherein the binding of said antibody or antigen-binding fragment to said mammalian GPR-9-6 can be inhibited by mAb 3C3 (ATCC Accession No. HB-12653).

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81. (New) The method of Claim 48 wherein said antibody or antigen-binding fragment has the epitopic specificity of mAb 3C3 (ATCC Accession No. HB-12653).
82. (New) The method of Claim 48 wherein the binding of said antibody or antigen-binding fragment to said mammalian GPR-9-6 can be inhibited by mAb GPR96-1 (ATCC Accession No. PTA-1470).
83. (New) The method of Claim 48 wherein said antibody or antigen-binding fragment has the epitopic specificity of mAb GPR96-1 (ATCC Accession No. PTA-1470).
84. (New) The method of Claim 47 wherein said function is selected from the group consisting of ligand binding, ligand-induced chemotaxis and ligand-induced  $\text{Ca}^{2+}$  flux.
85. (New) The method of Claim 84 wherein said ligand is TECK.
86. (New) The method of Claim 84 wherein said agent is an organic compound.
87. (New) The method of Claim 84 wherein said agent is a peptide.
88. (New) The method of Claim 84 wherein said agent is a nucleic acid.
89. (New) The method of Claim 46 wherein said agent can promote a function of GPR-9-6.
90. (New) The method of Claim 89 wherein said function is selected from the group consisting of agent-induced chemotaxis and agent-induced  $\text{Ca}^{2+}$  flux.
91. (New) The method of Claim 90 wherein said agent is an organic compound.
92. (New) The method of Claim 90 wherein said agent is a polypeptide.

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93. (New) The method of Claim 90 wherein said agent comprises TECK or a GPR-9-6-binding variant thereof.
94. (New) The method of Claim 90 wherein said agent is a chemokine.
95. (New) The method of Claim 94 wherein said chemokine is TECK.
96. (New) The method of Claim 90 wherein said agent is an antibody which bind a mammalian GPR-9-6 or antigen-binding fragment thereof.
97. (New) The method of Claim 90 wherein said agent is a peptide.
98. (New) The method of Claim 90 wherein said agent is a nucleic acid.
99. (New) The method of Claim 46 wherein said mammalian GPR-9-6 is a human GPR-9-6.
100. (New) The method of Claim 46 wherein said mammalian GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
101. (New) The method of Claim 46 wherein said cell is a recombinant cell.
102. (New) The method of Claim 46 wherein said cell is a cell line.
103. (New) The method of Claim 102 wherein said cell is selected from the group consisting of MOLT-4 and MOLT-13.
104. (New) The method of Claim 46 wherein said cell is a primary cell.
105. (New) The method of Claim 104 wherein said primary cell is a T cell.

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106. (New) The method of Claim 46 wherein said cell that expresses mammalian GPR-9-6 is contacted with said agent *in vitro*.
107. (New) The method of Claim 46 wherein said cell that expresses mammalian GPR-9-6 is contacted with said agent *in vivo*.
108. (New) A method of modulating a function of GPR-9-6 comprising contacting a cell that expresses a GPR-9-6 with an agent which binds thereto and modulates a function of said GPR-9-6 selected from the group consisting of ligand binding, signalling activity and cellular response function wherein said GPR-9-6 binds TECK and comprises an amino acid sequence that is at least about 90 % similar to the amino acid sequence of SEQ ID NO:2.
109. (New) The method of Claim 108 wherein said ligand is TECK.
110. (New) The method of Claim 108 wherein said agent is an organic compound.
111. (New) The method of Claim 108 wherein said agent is an antibody or antigen-binding fragment thereof which binds said GPR-9-6 and inhibits the binding of a ligand to said GPR-9-6.
112. (New) The method of Claim 111 wherein the binding of said antibody or antigen-binding fragment to said GPR-9-6 can be inhibited by a peptide that consists of the amino acid sequence of SEQ ID NO:3.
113. (New) The method of Claim 111 wherein the binding of said antibody or antigen-binding fragment to said GPR-9-6 can be inhibited by mAb 3C3 (ATCC Accession No. HB-12653).

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114. (New) The method of Claim 111 wherein the binding of said antibody or antigen-binding fragment to said GPR-9-6 can be inhibited by mAb GPR96-1 (ATCC Accession No. PTA-1470).
115. (New) The method of Claim 108 wherein said agent is a peptide.
116. (New) The method of Claim 108 wherein said agent is a nucleic acid.
117. (New) The method of Claim 108 wherein said GPR-9-6 is a human GPR-9-6.
118. (New) The method of Claim 108 wherein said GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
119. (New) The method of Claim 108 wherein said cell is a recombinant cell.
120. (New) The method of Claim 108 wherein said cell is a cell line.
121. (New) The method of Claim 120 wherein said cell line is selected from the group consisting of MOLT-4 and MOLT-13.
122. (New) The method of Claim 108 wherein said cell is a primary cell.
123. (New) The method of Claim 122 wherein said primary cell is a T cell.
124. (New) The method of Claim 108 wherein said agent inhibits a function of said GPR-9-6.

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125. (New) The method of Claim 124 wherein the function is selected from the group consisting of ligand binding, signalling activity and cellular response function, wherein said signalling activity is ligand-induced  $\text{Ca}^{2+}$  flux and said cellular response function is ligand-induced chemotaxis.
126. (New) The method of Claim 108 wherein said agent promotes a function of said GPR-9-6.
127. (New) The method of Claim 126 wherein said function is selected from the group consisting of ligand binding, ligand-induced chemotaxis and ligand-induced  $\text{Ca}^{2+}$  flux.
128. (New) The method of Claim 108 wherein said cell that expresses GPR-9-6 is contacted with said agent *in vitro*.
129. (New) The method of Claim 108 wherein said cell that expresses GPR-9-6 is contacted with said agent *in vivo*.
130. (New) A method of inhibiting a function of GPR-9-6 comprising contacting a cell that expresses a mammalian GPR-9-6 with an antibody or antigen-binding fragment thereof which binds said mammalian GPR-9-6 and inhibits binding of a ligand to said GPR-9-6.
131. (New) The method of Claim 130 wherein said ligand is TECK.
132. (New) The method of Claim 130 wherein the binding of said antibody or antigen-binding fragment to said mammalian GPR-9-6 can be inhibited by a peptide that consists of the amino acid sequence of SEQ ID NO:3.

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133. (New) The method of Claim 130 wherein the binding of said antibody or antigen-binding fragment to said mammalian GPR-9-6 can be inhibited by mAb 3C3 (ATCC Accession No. HB-12653).
134. (New) The method of Claim 130 wherein said antibody or antigen-binding fragment has the epitopic specificity of mAb 3C3 (ATCC Accession No. HB-12653).
135. (New) The method of Claim 130 wherein the binding of said antibody or antigen-binding fragment to said mammalian GPR-9-6 can be inhibited by mAb GPR96-1 (ATCC Accession No. PTA-1470).
136. (New) The method of Claim 130 wherein said antibody or antigen-binding fragment has the epitopic specificity of mAb GPR96-1 (ATCC Accession No. PTA-1470).
137. (New) The method of Claim 130 wherein said mammalian GPR-9-6 is a human GPR-9-6.
138. (New) The method of Claim 130 wherein said mammalian GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
139. (New) The method of Claim 130 wherein said cell is a recombinant cell.
140. (New) The method of Claim 130 wherein said cell is a cell line.
141. (New) The method of Claim 140 wherein said cell is selected from the group consisting of MOLT-4 and MOLT-13.
142. (New) The method of Claim 130 wherein said cell is a primary cell.
143. (New) The method of Claim 142 wherein said primary cell is a T cell.

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144. (New) The method of Claim 130 wherein said cell that expresses mammalian GPR-9-6 is contacted with said agent *in vitro*.

145. (New) The method of Claim 130 wherein said cell that expresses mammalian GPR-9-6 is contacted with said agent *in vivo*.

146. (New) A method of inhibiting a function of GPR-9-6 comprising contacting a cell that expresses a GPR-9-6 with an antibody or antigen-binding fragment thereof which binds said GPR-9-6 and inhibits binding of a ligand to said GPR-9-6, wherein said GPR-9-6 binds TECK and comprises an amino acid sequence that is at least about 90% similar to the amino acid sequence of SEQ ID NO:2.

147. (New) The method of Claim 146 wherein said ligand is TECK.

148. (New) The method of Claim 146 wherein the binding of said antibody or said antigen-binding fragment to said GPR-9-6 can be inhibited by a peptide that consists of the amino acid sequence of SEQ ID NO:3.

149. (New) The method of Claim 146 wherein the binding of said antibody or antigen-binding fragment to said GPR-9-6 can be inhibited by mAb 3C3 (ATCC Accession No. HB-12653).

150. (New) The method of Claim 146 wherein said antibody or antigen-binding fragment has the epitopic specificity of mAb 3C3 (ATCC Accession No. HB-12653).

151. (New) The method of Claim 146 wherein the binding of said antibody or antigen-binding fragment to said GPR-9-6 can be inhibited by mAb GPR96-1 (ATCC Accession No. PTA-1470).

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152. (New) The method of Claim 146 wherein said antibody or antigen-binding fragment has the epitopic specificity of mAb GPR96-1 (ATCC Accession No. PTA-1470).

153. (New) The method of Claim 146 wherein said GPR-9-6 is a human GPR-9-6.

154. (New) The method of Claim 146 wherein said GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.

155. (New) The method of Claim 146 wherein said cell is a recombinant cell.

156. (New) The method of Claim 146 wherein said cell is a cell line.

157. (New) The method of Claim 156 wherein said cell is selected from the group consisting of MOLT-4 and MOLT-13.

158. (New) The method of Claim 146 wherein said cell is a primary cell.

159. (New) The method of Claim 158 wherein said primary cell is a T cell.

160. (New) The method of Claim 146 wherein said cell that expresses GPR-9-6 is contacted with said agent *in vitro*.

161. (New) The method of Claim 146 wherein said cell that expresses GPR-9-6 is contacted with said agent *in vivo*.

162. (New) A method of inhibiting a function of GPR-9-6 comprising contacting a cell that expresses a mammalian GPR-9-6 with an antibody or antigen-binding fragment thereof which binds said mammalian GPR-9-6 and inhibits binding of a ligand to said

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mammalian GPR-9-6, wherein said antibody or said antigen-binding fragment has the epitopic specificity of mAb 3C3 (ATCC Accession No. HB-12653).

Sub C, 163. (New) The method of Claim 162 wherein said GPR-9-6 is a human GPR-9-6.

164. (New) The method of Claim 162 wherein said GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.

165. (New) The method of Claim 162 wherein said cell is a recombinant cell.

166. (New) The method of Claim 162 wherein said cell is a cell line.

167. (New) The method of Claim 166 wherein said cell line is selected from the group consisting of MOLT-4 and MOLT-13.

168. (New) The method of Claim 162 wherein said cell is a primary cell.

169. (New) The method of Claim 168 wherein said primary cell is a T cell.

170. (New) The method of Claim 162 wherein said cell that expresses GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vitro*.

Sub C, 171. (New) The method of Claim 162 wherein said cell that expresses mammalian GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vivo*.

172. (New) A method of inhibiting a function of GPR-9-6 comprising contacting a cell that expresses a mammalian GPR-9-6 with an antibody or antigen-binding fragment thereof which binds said mammalian GPR-9-6 and inhibits binding of a ligand to said

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mammalian GPR-9-6, wherein said antibody or said antigen-binding fragment has the epitopic specificity of mAb GPR96-1 (ATCC Accession No. PTA-1470).

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173. (New) The method of Claim 172 wherein said GPR-9-6 is a human GPR-9-6.
174. (New) The method of Claim 172 wherein said GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
175. (New) The method of Claim 172 wherein said cell is a recombinant cell.
176. (New) The method of Claim 172 wherein said cell is a cell line.
177. (New) The method of Claim 176 wherein said cell line is selected from the group consisting of MOLT-4 and MOLT-13.
178. (New) The method of Claim 172 wherein said cell is a primary cell.
179. (New) The method of Claim 178 wherein said primary cell is a T cell.
180. (New) The method of Claim 172 wherein said cell that expresses GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vitro*.
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181. (New) The method of Claim 172 wherein said cell that expresses mammalian GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vivo*.
182. (New) A method of inhibiting a function of GPR-9-6 comprising contacting a cell that expresses a GPR-9-6 with an antibody or antigen-binding fragment thereof that binds said GPR-9-6 and inhibits the binding of a ligand to said GPR-9-6,

Sub C1 } wherein said GPR-9-6 binds TECK and comprises an amino acid sequence that is at least about 90% similar to the amino acid sequence of SEQ ID NO:2; and said antibody or said antigen-binding fragment has the epitopic specificity of mAb 3C3 (ATCC Accession No. HB-12653).

183. (New) The method of Claim 182 wherein said GPR-9-6 is a human GPR-9-6.
184. (New) The method of Claim 182 wherein said GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.
185. (New) The method of Claim 182 wherein said cell is a recombinant cell.
186. (New) The method of Claim 182 wherein said cell is a cell line.
187. (New) The method of Claim 186 wherein said cell line is selected from the group consisting of MOLT-4 and MOLT-13.
188. (New) The method of Claim 182 wherein said cell is a primary cell.
189. (New) The method of Claim 188 wherein said primary cell is a T cell.
190. (New) The method of Claim 182 wherein said cell that expresses GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vitro*.
- Sub C1 } 191. (New) The method of Claim 182 wherein said cell that expresses mammalian GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vivo*.

sub C.1 } 192. (New) A method of inhibiting a function of GPR-9-6 comprising contacting a cell that expresses a GPR-9-6 with an antibody or antigen-binding fragment thereof that binds said GPR-9-6 and inhibits the binding of a ligand to said GPR-9-6,

wherein said GPR-9-6 binds TECK and comprises an amino acid sequence that is at least about 90% similar to the amino acid sequence of SEQ ID NO:2; and

said antibody or said antigen-binding fragment has the epitopic specificity of mAb GPR96-1 (ATCC Accession No. PTA-1470).

193. (New) The method of Claim 192 wherein said GPR-9-6 is a human GPR-9-6.

194. (New) The method of Claim 192 wherein said GPR-9-6 comprises the amino acid sequence of SEQ ID NO:2.

195. (New) The method of Claim 192 wherein said cell is a recombinant cell.

196. (New) The method of Claim 192 wherein said cell is a cell line.

197. (New) The method of Claim 196 wherein said cell line is selected from the group consisting of MOLT-4 and MOLT-13.

198. (New) The method of Claim 192 wherein said cell is a primary cell.

199. (New) The method of Claim 198 wherein said primary cell is a T cell.

200. (New) The method of Claim 192 wherein said cell that expresses mammalian GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vitro*.

sub C.1 } 201. (New) The method of Claim 192 wherein said cell that expresses mammalian GPR-9-6 is contacted with said antibody or antigen-binding fragment *in vivo*.

202. (New) A method of modulating a function of GPR-9-6 comprising combining  
a cell that expresses mammalian GPR-9-6;  
a ligand of said mammalian GPR-9-6; and  
an agent which binds said ligand and modulates binding of said ligand to said  
mammalian GPR-9-6, whereby a function of said mammalian GPR-9-6 is modulated.
203. (New) The method of Claim 202 wherein said function is selected from the group  
consisting of ligand binding, signalling activity and cellular response function.
204. (New) The method of Claim 202 wherein said ligand is TECK.
205. (New) The method of Claim 202 wherein said agent inhibits binding of said ligand to said  
mammalian GPR-9-6.
206. (New) The method of Claim 205 wherein said agent is an antibody or antigen-binding  
fragment that binds TECK.
207. (New) The method of Claim 206 wherein the binding of said antibody or antigen-  
binding fragment to TECK can be inhibited by mAb 16.3.1 (ATCC Accession No. PTA-  
1468).
208. (New) The method of Claim 206 wherein said antibody or antigen binding fragment has  
the epitopic specificity of mAb 16.3.1 (ATCC Accession No. PTA-1468).
209. (New) The method of Claim 206 wherein the binding of said antibody or antigen-  
binding fragment to said TECK can be inhibited by mAb 11.3.1 (ATCC Accession No.  
PTA-1469).

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